

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jacob S. Mattis on February 12, 2010.

The application has been amended as follows:

In the specification, on page 7, in line 3, after "apparatus slip" inserted -- S --.

In the specification, on page 7, in line 5, after "well bore)." inserted --Each slip S comprises a body comprising a groove having an upper groove opening through which the die insert 1 is inserted and comprising a front groove opening and a back groove surface. Each die insert 1 comprises a leg portion comprising a front face 2 and a head portion comprising a back face 3 generally parallel to the front face. --.

Canceled claims 1-20.

Inserted new claim 21 as follows:

--21. (New) A pipe string handling apparatus for drilling or servicing rigs comprising:

a plurality of pipe handling slips comprising:
a slip body with a longitudinally extending groove having an upper groove opening, a front groove opening, and a back groove surface; and

a die insert insertable into the longitudinally extending groove of one of the plurality of slips through the upper groove opening, the die insert comprising:

a leg portion having a front face with a plurality of pipe gripping teeth for gripping a pipe string received by the apparatus, and

a head portion having a back face generally parallel to the front face;

wherein the head portion is received within the longitudinally extending groove and the leg portion extends through the front groove opening;

wherein the back face comprises a plurality of raised lands engaging the back groove surface, and wherein the raised lands longitudinally extend along the back face generally transverse to the longitudinal length of the die insert; and

wherein the slip comprises a material such that the raised lands are impressed into the back groove surface to transfer loading from the die insert to the slip to reduce the tendency of the die insert to longitudinally slide along the back groove surface. --.

Inserted new claim 22 as follows:

--22. (New) The apparatus of claim 21, wherein said raised lands have a cross-section having a sawtooth-shape. --.

Inserted new claim 23 as follows:

--23. (New) The apparatus of claim 21, wherein said raised lands are raised more than one one-thousandth of an inch from said back face of said die insert. --.

Inserted new claim 24 as follows:

--24. (New) The apparatus of claim 21, wherein said raised lands are formed by a scribing process. --.

Inserted new claim 25 as follows:

--25. (New) The apparatus of claim 21, wherein said raised lands are formed by an acid etching process. --.

Inserted new claim 26 as follows:

--26. (New) The apparatus of claim 21, wherein said raised lands are formed by a machining process. --.

Inserted new claim 27 as follows:

--27. (New) The apparatus of claim 21, wherein said raised lands form a uniform textured relief pattern on said back face of said die insert. --.

Inserted new claim 28 as follows:

--28. (New) A method for gripping a pipe, comprising:
inserting a die insert within a slip comprising a longitudinally extending groove having an upper groove opening, a front groove opening, and a back groove surface, wherein the die insert comprises:
a head portion insertable through the upper groove opening, the head portion having a back face with a plurality of raised lands thereon

extending along the back face generally transverse to the longitudinal length of the die insert ; and

a leg portion extending through the front groove opening, the leg portion comprising a front face generally parallel to the back face and having a front surface with a plurality of pipe gripping teeth adapted for gripping the pipe; and

engaging the front surface with the pipe, wherein engagement between the front surface and the pipe presses the back face of the die insert into the slip, and wherein the plurality of lands are impressed into the back groove surface to thereby transfer loading from the die insert to the slip to reduce the tendency of the die insert to longitudinally slide along the surface of the slip. --.

Inserted new claim 29 as follows:

--29. (New) The method of claim 28, wherein said raised lands have a cross-section having a sawtooth-shape. --.

Inserted new claim 30 as follows:

--30. (New) The method of claim 28, wherein said raised lands are raised more than one one-thousandth of an inch from said back face of said die insert. --.

Inserted new claim 31 as follows:

--31. (New) The method of claim 28, wherein said raised lands are formed by a scribing process. --.

Inserted new claim 32 as follows:

--32. (New) The method of claim 28, wherein said raised lands are formed by an acid etching process. --.

Inserted new claim 33 as follows:

--33. (New) The method of claim 28, wherein said raised lands are formed by a machining process. --.

Inserted new claim 34 as follows:

--34. (New) The method of claim 28, wherein said raised lands form a uniform textured relief pattern on said back face of said die insert. --.

2. The following changes to the drawings have been approved by the examiner and agreed upon by applicant:

In Figure 1, "SLIP" should be replaced with --S--.

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

3. The following is an examiner's statement of reasons for allowance:

As to claims 21 and 28, Hayatdavoudi (US 4,823,919) in view of Guice (US 4,678,209) discloses the claimed apparatus with the exception of the die insert comprising a head portion engagably received within the longitudinally extending groove wherein the back face comprises a plurality of raised lands engaging the back groove surface of the longitudinally extending groove, the raised lands longitudinally extending along the back face generally transverse to the longitudinal length of the die insert;

wherein the slip comprises a material such that the raised lands are impressed into the back groove surface to transfer loading from the die insert to the slip to reduce the tendency of the die insert to further longitudinally slide along the back groove surface.

There is no teaching or suggestion, absent the applicant's own disclosure, for one having ordinary skill in the art at the time the invention was made to modify the apparatus disclosed by Hayatdavoudi in view of Guice to have the above mentioned elemental features. Furthermore, such modifications would yield unexpected and unpredictable results.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to pipe string handing apparatuses:

Abegg (US 2,010,938), Burns et al. (US 2,012,337), Bangert (US 6,378,399), Allamon et al. (US 6,264,395) and Howe (US 784,400) are cited for pertaining to apparatuses comprising a plurality of slips and a plurality of die inserts comprising pipe engaging teeth.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL P. FERGUSON whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (6:30am-3:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MPF
02/12/10

/Michael P. Ferguson/
Primary Examiner, Art Unit 3679